ASSIGNMENT OF PATENTS

This ASSIGNMENT OF PATENTS (this "Assignment of Patents"), dated as of November 21, 2001, is entered into by and among Micron Technology, Inc., a Delaware corporation ("Buyer"), Photobit Corporation, a Delaware corporation ("Parent"; Parent is sometimes referred to herein as a "Seller") and Photobit Technology Corporation, a Delaware corporation and a wholly owned subsidiary of Seller ("Subsidiary"; Parent and Subsidiary are sometimes referred to herein as a "Seller" and sometimes collectively as the "Sellers").

This Assignment of Patents is entered into pursuant to Section 6.23 of the Asset Purchase Agreement dated as of November 21, 2001, (the "Asset Purchase Agreement;" capitalized terms used herein but not otherwise defined herein shall have the same meanings assigned to them in the Asset Purchase Agreement), by and among Parent, Subsidiary, Buyer, Dr. Sabrina Kemeny, Dr. Eric Fossum, Robert Panicacci and the Seller Representative.

Pursuant to the Asset Purchase Agreement, Sellers agreed, among other things, to transfer to Buyer all of Sellers' right, title and interest in and to the Acquired Assets, in exchange for the payment by Buyer of the Purchase Price and the assumption by Buyer of the Assumed Liabilities, in each case on the terms and subject to the conditions provided in the Asset Purchase Agreement.

1.   Assignment of Patents by Sellers. Sellers hereby irrevocably and formally grant, bargain, sell, transfer, convey, assign and deliver to Buyer all right, title and interest in and to the patents, patent applications and provisional applications owned by each Seller throughout the world, together with any and all rights of such Seller associated with inventions claimed therein and/or with the applications and patents, whether or not such patents are registered with the United States Patent and Trademark Office or other comparable governmental authority of any foreign jurisdiction (including, without limitation, those patents and applications set forth on Exhibit A hereto) (the "Assigned Patents"), free and clear of all encumbrances, together with all causes of action and other rights to sue for and remedies against past, present and future infringements of any of the foregoing, together with the right to collect damages therefore, and rights of priority and protection of interests therein under the laws of any jurisdiction worldwide and all tangible embodiments thereof, to have and to hold the same unto Buyer, its successors and assigns, for and during the existence of such rights and all renewals thereof.

2.   Further Assurances. Each Seller hereby covenants and agrees that from time to time and at the expense of such Seller and without further consideration, upon request of Buyer, each Seller shall and shall cause each of its affiliates to execute and deliver such instruments and documents, and take such further actions, as Buyer reasonably may request in order to sell, convey, transfer and assign to Buyer, or to record Buyer's interest in or title to, any of the Assigned Patents.

3.   Power of Attorney. Each Seller hereby constitutes and appoints Buyer as such Seller's true and lawful attorney in fact, with full power of substitution in such Seller's name and

stead, to take any and all steps, including proceedings at law, in equity or otherwise, to execute, acknowledge and deliver any and all instruments and assurances necessary or expedient in order to vest or perfect the aforesaid rights and causes of action more effectively in Buyer or to protect the same or to enforce any claim or right of any kind with respect thereto. Each Seller hereby declares that the foregoing power is coupled with an interest and as such is irrevocable.

4. <u>Successors and Assigns</u>. This Assignment of Patents shall be enforceable against the successors and assigns of Sellers and shall inure to the benefit of the successors and assigns of Buyer.

5. <u>Governing Law</u>. This Assignment of Patents shall be governed by and construed in accordance with the laws of the United States, in respect to patent issues and in all other respects, including as to validity, interpretation and effect, by the internal laws of the State of California, without giving effect to the conflict of laws rules thereof.

IN WITNESS WHEREOF, this Assignment of Patents has been duly executed and delivered as of the date first written above.

MICRON TECHNOLOGY, INC.

By: _____

Printed Name: _W.G. STOVER, JR_____

Title: _Vice President of Finance and C.F.O._

PHOTOBIT CORPORATION

By: _____

Printed Name: _____

Title: _____

PHOTOBIT TECHNOLOGY CORPORATION

By: _____

Printed Name: _____

Title: _____

IN WITNESS WHEREOF, this Assignment of Patents has been duly executed and delivered as of the date first written above.

MICRON TECHNOLOGY, INC.
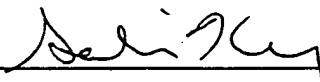
By:_____

Printed Name:_____

Title: _____

PHOTOBIT CORPORATION

By:_____

Printed Name: _SABRINA KEMENY_____

Title: _____CEO_____

PHOTOBIT TECHNOLOGY CORPORATION

By:_____

Printed Name: _SABRINA KEMENY_____
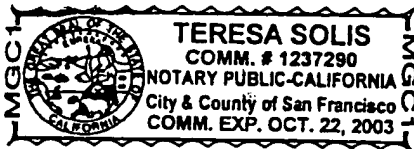
Title: _EXECUTIVE V. P._____

ACKNOWLEDGMENT – PHOTOBIT CORPORATION

STATE OF CALIFORNIA   )
) SS:

COUNTY OF SAN FRANCISCO   )

I, _Teresa Solis_, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that _Sabrina Kemeny_, appeared before me this day in person, and acknowledged that she executed and delivered the Instrument of Assignment of Patents above as her free and voluntary act and in her representative capacity for Photobit Corporation, a Delaware corporation, acting in its representative capacity as the Chairman and CEO of Photobit Corporation., a Delaware corporation, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this 21st day of November 2001.

Notary Public

My Commission Expires: October 22, 2003

TERESA SOLIS
COMM. # 1237290
NOTARY PUBLIC-CALIFORNIA
City & County of San Francisco
COMM. EXP. OCT. 22, 2003

ACKNOWLEDGMENT – PHOTOBIT TECHNOLOGY CORPORATION

STATE OF CALIFORNIA   )
) SS:

COUNTY OF SAN FRANCISCO   )

I, _Teresa Solis_, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that _Sabrina Kemeny_, appeared before me this day in person, and acknowledged that she executed and delivered the Instrument of Assignment of Patents above as her free and voluntary act and in her representative capacity for Photobit Technology Corporation, a Delaware corporation, acting in their representative capacity as the Chairman and CEO of Photobit Technology Corporation, a Delaware corporation, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this 21st day of November 2001.
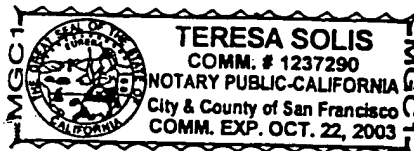
Notary Public

My Commission Expires: October 22, 2003

TERESA SOLIS
COMM. # 1237290
NOTARY PUBLIC-CALIFORNIA
City & County of San Francisco
COMM. EXP. OCT. 22, 2003

EXHIBIT A

Photobit Patents Issued and Pending Applications.

	Photobit Patent or Provisional Application Title	Description/Comments	PB NTR #
	PATENTS ISSUED		
1	Median Filter With Embedded Analog to Digital Converter	Patent #5,995,163	9601
2	Low-Voltage Common Source Switched-Capacitor Amplifier	Patent #6,049,247	9702
3	Quantum Efficiency Improvements in Active Pixel Sensors	Patent #6,005,619	9704
4	Bidirectional Follower for Driving a Capacitive Load	Patent #6,043,690	9719
5	Analog-to-Digital Conversion	Patent #6,087,970	9603
6	Low-Voltage Comparator with Wide Input Voltage Swing	Patent #6,147,519	9703
7	Programmable Analog Arithmetic Circuit for Imaging Sensor	Patent #6,166,367	9706
8	Correction of Missing Codes Nonlinearity in A to D Converters	Patent #6,255,970	9708
9	Charge-Domain Analog Readout for an Image Sensor	Patent #6,222,175	9712
10	A/D Converter Correction Scheme	Patent #6,191,714	9713
11	Active Pixel Sensor With Current Mode Readout	Patent #6,194,696	9714
12	Differential Non-Linearity Correction Scheme	Patent #6,215,428	9716
13	CMOS Image Sensor with Different Pixel Sizes for Different Colors	Patent #6,137,100	9718
14	Pulse-Controlled Light Emitting Diode Source	Patent #6,222,172	9801
15	CMOS Voltage Comparator Capable of Operating With Small Input Voltage Difference	Patent #6,184,721	9809
16	Using Single Lookup Table To Correct Differential Non-Linearity Errors In An Array Of A/D Converters	Patent #6,211,804	9813
17	Concentric Lens with Aspheric Correction	Patent #6,097,545	9816
18	Using Cascaded Gain Stages for High-Gain and High-Speed Readout of Pixel Sensor Data	Patent #6,229,134	9817
19	Lock-In Pinned Photodiode Photo-detector	Patent #6,239,456	9822
20	Ping-Pong Readout	Patent #6,204,792	9828
21	Nonlinear Flash Analog To Digital Converter Used In Active Pixel System	Patent #6,295,013	9818 9819
	PHOTOBIT/GENTEX JOINTLY OWNED IP		
1	**Wide Dynamic Range Optical Sensor**	Patent #6,008,486	
2	**Vehicle Vision System**	Patent Application Serial No. 09/001,855	
	PATENT APPLICATIONS		
1	Dead Pixel Correction by Row/Column Substitution	Patent Application Serial No. 09/031,145	9602
2	Color Interpolation	Patent Application Serial No. 09/028,961	9604
3	Double Comparison Successive Approximation Method and Apparatus	Patent Application Serial No. 09/360,294	9701
4	Digital Exposure Circuit For An Image Sensor	Patent Application Serial No. 09/298,306	9705
5	Method and Circuit for Fast and Accurate Adjustment of Integration Time for CMOS APS Cameras	Patent Application Serial No. 09/281,765	9707
6	Smart Column Controls for High Speed Multi-Resolution Sensors	Patent Application Serial No. 09/251,758	9709
7	Increasing Readout Speed in CMOS APS Sensors through Block Readout	Patent Application Serial No. 09/274,739	9710
8	Active Pixel Color Linear Sensor With Line-Packed Pixel Readout	Patent Application Serial No. 09/252,428	9711
9	Three Sided Buttable CMOS Image Chip	Patent Application Serial No. 09/211,718	9715

	Photobit Patent or Provisional Application Title	Description/Comments	PB NTR #
10	Photodiode-Type Pixel For Global Electronic Shutter And Reduced Lag	Patent Application Serial No. 09/025,079	9717
11	Wide Dynamic Range Fusion Using External Memory Look-Up	Patent Application Serial No. 09/299,066	9720
12	Active Pixel Sensor With Mixed Analog and Digital Signal Integration	Patent Application Serial No. 09/183,389	9721
13	Look Ahead Shutter Pointer Allowing Real Time Exposure Control	Patent Application Serial No. 09/038,888	9802
14	Readout Circuit With Gain and Analog-to-Digital Conversion For Image Sensor	Patent Application Serial No. 09/264,501	9803
15	Using A Single Control Line To Provide Select And Reset Signals In Two Rows Of A Digital Imaging Device	Patent Application Serial No. 09/250,623	9804
16	High Resolution CMOS Circuit Using a Matched Impedance Output Transmission Line	Patent Application Serial No. 09/359,056	9806
17	Reducing Internal Bus Speed in a Bus System Without Reducing Readout Rate	Patent Application Serial No. 09/359,068	9807
18	RAM Line Storage for Fixed Pattern Noise Correction	Patent Application Serial No. 09/066,506	9808
19	Latched Row Logic for a Rolling Exposure Snap	Patent Application Serial No. 09/261,361	9810 9812
20	Analog To Digital Converter with Internal Data Storage	Patent Application Serial No. 09/281,358	9811
21	Low Light Sensor Signal to Noise Improvement	Patent Application Serial No. 09/359,065	9814
22	Nonlinear Flash Analog to Digital Converter Used in Active Pixel System	Patent Application Serial No. 09/161,355	9818 9819
23	Oversampled Centroid A to D Converter	Patent Application Serial No. 09/430,625	9820
24	Over Sampled CMOS Image Sensor	Patent Application Serial No. 09/429,776	9821
25	Pinned Floating Photoreceptor With Active Pixel Sensor	Patent Application Serial No. 09/397,381	9823
26	Oversampled CMOS Image Sensor	Patent Application Serial No. 09/430,734	9824
27	Optical Range Finder	Patent Application Serial No. 09/429,882	9825
28	Color Correction of Multiple Colors Using A Calibrated Technique	Patent Application Serial No. 09/209,982	9826
29	Micro Power Micro-Sized CMOS Active Pixel	Patent Application Serial No. 09/418,961	9827
30	ALow Power Signal Chain for Image Sensors CMOS APS	Patent Application Serial No. 09/590,785	9829
31	Matched Color CMOS Sensor	Patent Application Serial No. 09/267,503	9831
32	Clear Plastic Packaging in a CMOS Active Pixel Image	Patent Application Serial No. 09/442,871	9832
33	Semiconductor Imaging Sensor Array Devices With Dual-Port Digital Readout for CMOS Image Sensor	Patent Application Serial No. 09/449,194	9833
34	High-Speed Sampling Of Signals In Active Pixel Sensors	Patent Application Serial No. 09/527,422	9834
35	Multi-Chip Addressing For The I²C Bus	Patent Application Serial No. 09/459,720	9835
36	Circuits larger than the max. Reticle size in deep sub micron process	Patent Application Serial No. 09/523,127	9836
37	Compensation for Optical Distortion at Imaging Plane	Patent Application Serial No. 09/354,930	9837

	Photobit Patent or Provisional Application Title	Description/Comments	PB NTR #
38	Contoured Surface of Image Plane Array Cover Plate	Patent Application Serial No. 09/470,284	9839
39	Backside Illumination of CMOS Image Sensor	Patent Application Serial No. 09/483,362	9901
40	A Technique For Flagging Oversaturated Pixels	Patent Application Serial No. 09/505,645	9902
41	Diagonalized Image Sensor Pixels For Improved Effective Performance	Patent Application Serial No. 09/507,565	9903
42	Active Pixel Sensor With Fully-Depleted Buried Photoreceptor	Patent Application Serial No. 09/516,433	9904
43	An Analog Solution for Oversaturated Pixel Problem	Patent Application Serial No. 09/522,287	9905
44	Superposed Multi-Junction Color APS	Patent Application Serial No. 09/522,286	9906
45	Multi Junction APS with Dual Simultaneous Integration	Patent Application Serial No. 09/519,930	9907
46	A Novel Idea for a New Readout Structure of APS	Patent Application Serial No. 09/595,592	9908 9909 9910
47	Increasing Pixel Conversion Gain In CMOS Image Sensors	Patent Application Serial No. 09/553,980	9912
48	Dual Sensitivity Image Sensor	Patent Application Serial No. 09/596,757	9915
49	Layout Technique For Semiconductor Processing Using Stitching	Patent Application Serial No. 09/687,266	9916 9917
50	Active Pixel Sensor with Reduced Fixed Pattern Noise	Patent Application Serial No. 09/550,816	9918
51	Low Voltage Analog-To-Digital Converters With Internal Reference Voltage and Offset	Patent Application Serial No. 09/538,043	9922
52	Techniques to Increase Signal Dynamic Range in CMOS APS	Patent Application Serial No. 09/653,527	9923
53	Low Power Analog-To-Digital Conversion	Patent Application Serial No. 09/528,310	9926
54	Calibration Circuit for Successive Approximation ADC.	Patent Application Serial No. 09/746,565	9927
55	P-Type Reset/Readout Circuitry for Radiation Hard APS	Patent Application Serial No. 09/648,403	9929
56	Novel Lenses Using Coherent Optical Fiber Bundles	Patent Application Serial No. 09/745,854	9931
57	Dynamic Histogram Equalifzation for High Dynamic Range Images	Patent Application Serial No. 09/778,151	9933
58	Compact Realization of 2-Reset Pointer Rolling Shutter in CMOS Sensor	Patent Application Serial No. 09/776,400	9935
59	Testing Of Solid-State Image Sensors	Patent Application Serial No. 09/692,742	9941
60	Adjustable Color-Plane-Pixel Integration Times for Asynchronous Pixel Saturation Avoidance	Patent Application Serial No. 09/761,868	9943
61	Improved Method for Flushed Reset	Patent Application Serial No. 09/858,748	9944
62	A New Frame-Shutter Pixel Structure with an Isolated Storage Node	Patent Application Serial No. 09/792,634	9945
63	Frame-Shuttering Scheme For Increased Frame Rate	Patent Application Serial No. 09/792,292	9946
64	Shared Photodetector Active Pixel	Patent Application Serial No. 09/681,639	9948
65	An Optimal Layout Technique for Row/Column Decoders to Reduce Number of Blocks	Patent Application Serial No. 09/860,031	9950
66	Microlenses With Spacking Elements To Increase An Effective Use of Substrate	Patent Application Serial No. 09/859,224	2004 2006
67	Pixel Optimization for Color	Patent Application Serial No. 09/922,507	2009

	Photobit Patent or Provisional Application Title	Description/Comments	PB NTR #
68	Image Sensing System With Histogram Modification	Patent Application Serial No. 09/761,218	2012
69	Image Sensor Having Boostted Reset	Patent Application Serial No. 09/917,195	2014 2015
70	A High-Speed Analog-To-Digital Converter Using Multiple Staggered Successive Approximation Cells	Provisional Patent Application Serial No. 60/243,324	2016
71	White Spot Reduction For CMOS Imaging	Provisional Patent Application Serial No. 60/243,328	2017
72	New Architecture For High-Speed ADC Using Multiple Successive Approximation Cells	Provisional Patent Application Serial No. 60/253,430	2019
73	CMOS Sensor With Dual Column Parallel Analog-To-Digital Converters	Provisional Patent Application Serial No. 60/313,117	2020
74	Reference Voltage Circuit For Differential Analog-To-digital Converter (ADC)	Provisional Patent Application Serial No. 60/247,401	2021
75	Pseudo Random Assignment To Remove FPN Of High-Speed ADC Using Multiple Successive Approximation Cells	Provisional Patent Application Serial No. 60/306,753	2022
76	Frame-Scale Package	Provisional Patent Application Serial No. 60/245,085	2024
77	Black-Level Compensation With On-Chip successive Approximation ADC	Provisional Patent Application Serial No. 60/244,412	2025
78	An Improved Frame Shutter For CMOS APS	Provisional Patent Application Serial No. 60/243,899	2026
79	Wide Dynamic Range Operation For CMOS Sensor With Freeze-Frame Shutter	Provisional Patent Application Serial No. 60/243,898	2027
80	Freeze-Frame Shutter Imager With Increased Dynamic Range	Provisional Patent Application Serial No. 60/242,215	2028
81	Power Optimization For Class A Amplifier With Variable Signal Gain By matching Of Unity Gain Bandwidth To the Demanded Gain	Provisional Patent Application Serial No. 60/285,431	2029
82	Dynamic Range Extension In Color CMOS Active Pixel Sensors	Provisional Patent Application Serial No. 60/259,352	2030
83	Reducing Power Consumption And Noise In CMOS APS Sensor Through Block Read-Out	Patent Application Serial No. 09/901,280	2031
84	Reducing KTC Noise In 3T and 5T CMOS APS	Provisional Patent Application Serial No. 60/281,603	2102
85	Reference Voltage Stabilization In CMOS Sensors	Patent Application Filed 10/12/01 Serial No. pending	2109
86	Low Power Differential Charge Mode Readout Circuit, Pipelined Gain Stage, And Pipelined ADC For CMOS Active Pixel Sensors	Provisional Patent Application Serial No. 60/280,589	2110
87	A New Row Driver Circuit For CMOS APS Using Shared Row-Reset Pixels And Charge Pump Boosting Circuit	Patent Application Serial No. 09/876,848	2111
88	Temperature Sensor Using The Image Read-Out Signal Chain Of An Active Pixel Image Sensor Having Double Sampling Of A Pixel Reset Voltage And A Pixel Image Voltage Level	Provisional Patent Application Serial No. 60/306,718	2112
89	Method For Optimizing Microlens/CFA/Pixel Cooperative Performance In Image Sensors	Provisional Patent Application Serial No. 60/286,908	2113
90	On-Chip ADC Test for Image Sensors	Provisional Patent Application Serial No. 60/313,122	2115
91	Variable Pixel Clock Electronic Shutter Control Algorithm For Corruption-Free Image Stream During Pixel Speed Changes	Provisional Patent Application Serial No. 60/306,744	2118
92	An Architecture For Increased Dynamic Range In CMOS APS	Provisional Patent Application	2119

	Photobit Patent or Provisional Application Title	Description/Comments	PB NTR #
		Serial No. 60/607,514	
93	Flexy-Power Amplifier: A New Amplifier With Built-In Power Management	Provisional Patent - Application Serial No. 60/307,513	2120